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10/849,610	05/20/2004	Amos P. Waterland	AUS920040101US1	6813

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EXAMINER
TABOR, AMARE F

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2109	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Office Action Summary	**Application No.** 10/849,610	**Applicant(s)** WATERLAND, AMOS P.
		Examiner Amare F. Tabor	**Art Unit** 2109

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>20 May 2004</u>.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-25</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-25</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date <u>05/20/2004</u>.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application

6)☐ Other: _____ .

DETAILED ACTION

1.   Claims 1-25 are examined.

Claim Rejections - 35 USC § 101

2.   35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-25 are rejected under 35 U.S.C. 101 for failing to have concrete and tangible result. According to the disclosure of the invention, the process of human visual system having "**gestalt effect**" (Par. [0016] and [0042]) detects password characters that are "**displayed at a visibly detectable higher frequency**". This is directed to an abstract idea; thus rendering the claimed invention not having concrete and tangible result.

Claims 1, 10 and 19 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. According to the disclosure of the invention, frequency rate is used to change the stream of characters to be displayed (e.g., Par. [0018]). And, the independent claims 1, 10 and 19 recite the limitation "**higher frequency**"; thus the claims do not constitute statutory subject matter.

Claim 19 is rejected under 35 U.S.C. 101 because the claimed invention recite the limitations "**a computer product, residing on a computer readable medium...**" and "**means for displaying...**" These limitations recite process and apparatus claims respectively, which belong to different statutory category.

Claims 1 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claim 1 recite computer program, which are not tangibly embodied on an appropriate computer-readable storage medium; thus the claims do not constitute statutory subject matter.

Claims 2-9, 11-18 and 20-25 directed to non-statutory subject matter, since they depend on the preceding respective claims and have all the limitations of their independent claims.

Claim Rejections - 35 USC § 103

3.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-5, 8, 10-14, 17 and 19-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goal et al. (Pub. No.: US 2004/0168068 A1, applicant's admitted prior art), referred as "*Goal*" hereinafter and further in view of "*Hypponen*" (Pub No.: 2005/0044425 A1).

4.   *As per claim 1*, Goal discloses,

A method for secure password entry, comprising: (Par. [00002], lines 1-3, "the present invention relates in general to data processing system security, and in particular to a method and system for automatic password generation").

- changing stream of random characters, wherein a particular character within said changing stream of random characters is displayed at a visibly detectable higher frequency; (abstract, lines 10-12, "randomly generated characters of identical nature are then assigned to each position within the password to create a new password") and ("Par. [0029], lines 1-4, "next, an analysis is performed of each character within the multiple character passwords for a target data processing system to determine the nature of the character at a particular string position").

Goal does not explicitly disclose,

- displaying a password prompt and receiving input to increment or decrement said particular character to reach a password character of a password

However, in the same filed of endeavor, Hypponen disclose the above limitation as, (Par. [0035], lines 2-4, "there is provided a method of generating or entering a password or a passphrase or encryption key on a computer system"). Hypponen further disclose, (Par. [0037], "selecting at least one value from each stored set or from each of the plurality of the stored sets;") which include inherent password displaying means; and (Par. [0038], "combining the selected values or components thereof to form a password, passphrase, or encryption key").

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to combine the teachings of Hypponen into the method of Goal, because one of ordinary skill in the art would want to speed the password entry process (see Hypponen Par. [0034]).

5.   *As per claim 2*, claim 1 is incorporated and further Goal discloses,

- displaying a plurality of character positions, wherein a stream of random characters is displayed in each of said plurality of character positions, wherein a particular position from among said plurality of character positions provides said password prompt (Par. [11], lines 10-14, "randomly generated characters of identical nature are then assigned to each position within the

password sting to create a new password, which will comply with the specified rules for a particular target system").

6.   *As per claim 3,* Goal does not disclose,

    - adjusting which character position from among said plurality of character positions provides said password prompt

However, Hypponen discloses, (Par. [0040], lines 6-14, "in one embodiment, the interface comprises a graphically displayed slider, thumb wheel or the like, which can be operated by the user with a joystick, roller or another input device to scroll through the values of each domain in order to select a value for that domain. More preferably, for each position of the slider or wheel, the value corresponding to that position (or an element mapped to the value) is displayed to provide visual feedback to the user").

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to combine the teachings of Hypponen into the method of Goal, because one of ordinary skill in the art would want to make memorization of password characters easy for users (see Hypponen Par. [0032]).

7.   *As per claim 4,* Goal discloses,

    - adjusting a number of said plurality of character positions (Par. [0027], lines 4-9, "as depicted, table 70 includes two rows, 72 and 74. Row 72 is utilized to designate each string position within a multi-character password string. As depicted, any number of characters may be accommodated by simply providing a table of sufficient dimension").

8.   *As per claims 5,* Goal discloses,

    - responsive to receiving input of a password completion character indicating that said password is complete, securely passing said password to a requesting software layer (FIG. 4 and Par. [0037], "referring again to block 98, in the event the newly created password has been rejected by the target data process system 'N' times, the process passes from block 98 to block 100. Block 100 illustrates the generation of an alert to the user of the data processing system so that a password may be manually generated and submitted prior to the target data processing system prohibiting further accesses by this user. Thereafter, or after the password has been accepted by the target data processing system, the process passes to block 102 and returns").

9.   *As per claim 8,* Goal discloses,

        - generating said stream of random characters, wherein said particular character is randomly selected (Par. [0011], lines 10-14, "randomly generated characters of identical nature are then assigned to each position within the password sting to create a new password, which will comply with the specified rules for a particular target system").

10.   *As per claims 10 and 19,* rejection of claim 1 is applied; and further Goal discloses,

        - a data processing system for controlling a display interface; and a computer program product, residing on a computer readable medium (Par. [0013], "FIG. 1 is a schematic representation of a plurality of data processing systems linked together over a network, within which the method and system of the present invention may find application"); and ("FIG. 2 & Par. [0023], lines 16-18, "communication interface 40 provides a means by which data processing system 10 may interface a network such as Internet 20").

        Goal does not explicitly disclose,

        - means for displaying a password prompt and means for receiving input to increment or decrement said particular character to reach a password character of a password

        However, Hypponen disclose, (Par. [0035], lines 2-4, "there is provided a method of generating or entering a password or a passphrase or encryption key on a computer system"). Hypponen further disclose, (Par. [0037], "selecting at least one value from each stored set or from each of the plurality of the stored sets"); which include inherent means for password displaying and receiving input.

11.   *As per claims 11-14 and 20-23,*

        These claims recite means for the respective methods of claims 2-5. Since claims 2-5 implicitly contain a means for the methods, the claims are rejected for the same reason set forth for rejection of claims 2-5 above and further Goal disclose:

        - means for displaying a plurality of character positions, wherein a stream of random characters is displayed in each of said plurality of character positions, wherein a particular position from among said plurality of character positions provides said password prompt (Par. [11], lines 10-14, "randomly generated characters of identical nature are then assigned to each position within the password sting to create a new password, which will comply with the specified rules for a particular target system"); which include inherent means for displaying plurality of character positions.

        - means for adjusting a number of said plurality of character positions (Par. [0027], lines 4-9, "as depicted, table 70 includes two rows, 72 and 74. Row 72 is utilized to designate each string position within a multi-character password string. As depicted, any number of characters may be

accommodated by simply providing a table of sufficient dimension"); which include inherent means for adjusting a number of plurality character positions.

- ***means, responsive to receiving input of a password completion character indicating that said password is complete, for securely passing said password to a requesting software layer*** (FIG. 4 and Par. [0037], "referring again to block 98, in the event the newly created password has been rejected by the target data process system 'N' times, the process passes from block 98 to block 100. Block 100 illustrates the generation of an alert to the user of the data processing system so that a password may be manually generated and submitted prior to the target data processing system prohibiting further accesses by this user. Thereafter, or after the password has been accepted by the target data processing system, the process passes to block 102 and returns"); which include inherent means for securely passing password.

Goal does not disclose,

- ***means for adjusting which character position from among said plurality of character positions provides said password prompt***

However, Hypponen discloses, (Par. [0040], lines 6-14, "in one embodiment, the interface comprises a graphically displayed slider, thumb wheel or the like, which can be operated by the user with a joystick, roller or another input device to scroll through the values of each domain in order to select a value for that domain. More preferably, for each position of the slider or wheel, the value corresponding to that position (or an element mapped to the value) is displayed to provide visual feedback to the user"); which include inherent means for adjusting character position for prompt.

12.   *As per claims 17 and 24,*

These claims recite means for the method of claim 8. Since claim 8 implicitly contains a means for the method, claims 17 and 24 are rejected for the same reason set forth for rejection of claim 8 above and Goal further disclose:

- ***means for generating said stream of random characters, wherein said particular character is randomly selected*** (Par. [0011], lines 10-14, "randomly generated characters of identical nature are then assigned to each position within the password sting to create a new password, which will comply with the specified rules for a particular target system"); which include inherent means for generating stream of characters randomly.

Claims 6-7, 9, 15-16, 18 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goal and further in view of Hypponen and further in view of Ganesan et al. (US Pat No.: 5,394,471), referred as "***Ganesan***" hereinafter.

13.   *As per claims 6,* neither Goal nor Hypponen explicitly disclose,

        - responsive to receiving a request for a password from a software layer within a data processing system, invoking a password entry controller from within said data processing system, wherein said password entry controller controls said displaying said password prompt and said receiving input to increment or decrement said particular character

        However; in the same field of endeavor, Ganesan disclose the above limitation, (FIG. 4 & column 10, lines 25-28 and 37-41, "in one embodiment of the password test system of the present invention, a user password is selected and input through user input device 110 to the local processing unit 106 for verification via interface 124;") and ("if the new password falls within the threshold value which is also which is also retrieved from storage device 104, it is validated by processing unit 106 and notified to the user input device 110 from which the password was identified").

        Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to combine the teachings of Ganesan into the method of Goal and Hypponene, because one of ordinary skill in the art would want to test the validity of password in a network system (see Ganesan column 10, lines 46-49).

14.   *As per claim 7,* rejection of claim 6 above is incorporated.

        Neither Goal nor Hypponen explicitly disclose,

        - responsive to receiving, at a client system, a request for a password entry from a server system from which said client system is attempting to access a resource, invoking a password entry controller from within said data processing system, wherein said password entry controller controls said displaying said password prompt and said receiving input to increment or decrement said particular character

        However, Ganesan disclose the above limitation, (column 10, lines 50-53 and 64-68, "user passwords are selected and input through user input device 110 via local processing unit 106 to network processing unit via the applicable interfaces and LAN link;") and ("if the new password falls within the validity threshold value retrieved by processing unit 112 from storage device 108, it is validated by processor 112 and notified to the user input device 110 or 114 from which the password was identified via the applicable communication link").

15.   *As per claim 9,* neither Goal nor Hypponen explicitly disclose,

        - adjusting a frequency percentage at which said particular character is displayed in said stream of random characters

However, Ganesan discloses the above limitation as, (column 5, lines 44-48, "the first processor preferably includes the capability to adjust the frequency of occurrence of any bad password character which is computed to b e less than or equal to five").

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to combine the teachings of Ganesan into the methods of Goal and Hypponen, because one of ordinary skill in the art would want to identify characters of the bad password (see Ganesan column 4, lines 20-35).

16.   *As per claims 15 and 16,*

These claims recite means for the methods of claim 6 and 7. Since claims 6 and 7 implicitly contain a means for the methods, the claims are rejected for the same reason set forth for rejection of claims 6 and 7 above.

Neither Goal nor Hypponen explicitly disclose,

- means, responsive to receiving a request for a password from a software layer within a data processing system, for invoking said password entry controller

However, in the same field of endeavor, Ganesan disclose the above limitation, (FIG. 4 & column 10, lines 25-28 and 37-41, "in one embodiment of the password test system of the present invention, a user password is selected and input through user input device 110 to the local processing unit 106 for verification via interface 124;") and ("if the new password falls within the threshold value which is also which is also retrieved from storage device 104, it is validated by processing unit 106 and notified to the user input device 110 from which the password was identified"); which include inherent means for invoking the password entry controller.

- means, responsive to receiving a request for a password entry from a server system from which said client system is attempting to access a resource, for invoking a password entry controller

However, Ganesan disclose the above limitation, (column 10, lines 50-53 and 64-68, "user passwords are selected and input through user input device 110 via local processing unit 106 to network processing unit via the applicable interfaces and LAN link;") and ("if the new password falls within the validity threshold value retrieved by processing unit 112 from storage device 108, it is validated by processor 112 and notified to the user input device 110 or 114 from which the password was identified via the applicable communication link") ; which include inherent means for invoking the password entry controller.

17.   _As per claims 18 and 25,_

These claims recite means for the method of claim 8. Since claim 9 implicitly contains a means
for the method, the claims are rejected for the same reason set forth for rejection of claim 9 above.

Neither Goal or Hypponen disclose,

*- means for adjusting a frequency percentage at which said particular character is
displayed in said stream of random characters*

However, Ganesan discloses the above limitation as, (column 5, lines 44-48, "the first processor
preferably includes the capability to adjust the frequency of occurrence of any bad password character
which is computed to b e less than or equal to five"); which include inherent means for adjusting a
frequency percentage.

18.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
(See PTO-892).

19.   Any inquiry concerning this communication or earlier communications from the examiner should
be directed to Amare F. Tabor whose telephone number is (571) 270-3155. The examiner can normally
be reached on Mon-Fri 7:30a.m. to 5:00p.m., EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor,
Chameli Das can be reached on (571) 272-3696. The fax phone number for the organization where this
application or proceeding is assigned is 571-273-8300.

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at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative
or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-
1000.

CHAMELI DAS
SUPERVISORY PATENT EXAMINER

AFT

8/2/07